Copending 10/104, 662

Serial No. 10/104,862

Amendments to the Claims

- 1.-29. Canceled.
- 30. (currently amended): A method for delivering a pharmaceutically active agent to the respiratory tract of a patient in need of treatment comprising the steps of:
 - a. preparing a liquid carrier vehicle comprising:
 - i. from about 50% V/V to about 100% V/V water;
 - ii. from about 0% to about 40% V/V ethanol;
 - iii. from about 0% to about 30% V/V of a co-solvent;
 - iv. from about 0.5% to about 10% W/V of a pharmaceutically acceptable excipient; and
 - v. from about 0.05% W/V to about 10% W/V of a derivatized carbohydrate surfactant having low animal toxicity and immunogenicity;
 - wherein said liquid carrier vehicle has a resistivity of from about 25 ohm m to about 8000 ohm m and a surface tension of from about 20 dyne/cm to about 40 dyne/cm;
 - dissolving or suspending an effective amount of a pharmaceutically active agent in said liquid carrier vehicle to produce a solution or suspension;
 - c. producing an aerosol of said solution or suspension using an electrohydrodynamic spraying/aerosolization means; and
 - d. administering said aerosol to the pulmonary tract of said patient via inhalation of said aerosol.

- 31. (currently amended): The method according to claim 30 comprising the steps of:
 - a. preparing a liquid carrier vehicle comprising:
 - i. from about 70% V/V to about 100% V/V water;
 - ii. from about 0% to about 30% V/V ethanol;
 - iii. from about 2.5% to about 10% V/V of said co-solvent;
 - iv. from about 0.5% to about 10% W/V of said pharmaceutically acceptable excipient; and
 - v. from about 0.3% W/V to about 5% W/V of said derivatized carbohydrate surfactant;

wherein said liquid carrier vehicle has a resistivity of from about 100 ohm m to about 500 ohm m and a surface tension of from about 25 dyne/cm to about 30 dyne/cm;

- dissolving or suspending an effective amount of said pharmaceutically active agent in said liquid carrier vehicle to produce a solution or suspension;
- c. producing an aerosol of said solution or suspension using an electrohydrodynamic spraying/aerosolization means; and
- d. administering said aerosol to the pulmonary tract of said patient via inhalation of said aerosol.
- 32. (currently amended): The method according to claim 30 comprising the steps of:
 - a. preparing a liquid carrier vehicle comprising:
 - i. from about 80% V/V to about 100% V/V water;
 - ii. from about 0% to about 20% V/V ethanol;

- iii. from about 5.0% to about 10% V/V of said co-solvent;
- iv. from about 0.5% to about 5% W/V of said pharmaceutically acceptable excipient; and
- v. from about 0.3% W/V to about 5% W/V of said derivatized carbohydrate surfactant;

wherein said liquid carrier vehicle has a resistivity of from about 100 ohm m to about 500 ohm m and a surface tension of from about 25 dyne/cm to about 30 dyne/cm;

- b. dissolving or suspending an effective amount of said pharmaceutically active agent in said liquid carrier vehicle to produce a solution or suspension;
- producing an aerosol of said solution or suspension using an electrohydrodynamic spraying/aerosolization means; and
- d. administering said aerosol to the pulmonary tract of said patient via inhalation of said aerosol.
- 33. (original): The method according to claim 30 wherein said carrier vehicle contains from about 70% V/V to about 100% V/V water.
- 34. (original): The method according to claim 30 wherein said pharmaceutically acceptable excipient is present in said liquid carrier vehicle at from about 0.5% W/V to about 5% W/V.
- 35. (original): The method according to claim 34 wherein said pharmaceutically acceptable excipient is 0.5% W/V polyvinyl pyrrolidone.
- 36. (original): The method according to claim 30 wherein said co-solvent is present in said liquid carrier vehicle at from about 2.5% V/V to about 10% V/V.

- 37. (original): The method according to claim 36 wherein said co-solvent is present in said liquid carrier vehicle at from about 2.5% V/V to about 5% V/V.
- 38. (currently amended): The method according to claim 30 wherein said co-solvent is selected from the group consisting of propylene glycol, glycerol, and polyethylene glycol, and mixtures thereof.
- 39. (original): The method according to claim 38 wherein said co-solvent is 5% V/V propylene glycol.
- 40. (currently amended): The method according to claim 30 wherein said pharmaceutically acceptable excipient is selected from the group consisting of antioxidants, antimicrobials, pH adjusting acids and bases, tonicity adjusting agents, and viscosity adjusting agents, and mixtures thereof.
- 41. (currently amended): The <u>liquid earrier vehicle method</u> according to claim 30 wherein said liquid carrier has resistivity of from about 100 ohm m to about 500 ohm m and a surface tension of from about 20 dyne/cm to about 30 dyne/cm.
- 42. (currently amended): The method according to claim 30 wherein said surfactant is selected from the group consisting of n-octyl-β-D-glucopyranoside, n-nonyl-β-D-glucopyranoside, decyl-β-D-glucopyranoside, n-dodecyl-β-D-glucopyranoside, [[and]] n-tetradecyl-β-D-maltopyranoside, and mixtures thereof.
- 43. (currently amended): The method according to claim 42 wherein said surfactant is present in said liquid carrier vehicle at <u>from</u> about 0.3% W/V to from about 5% W/V.